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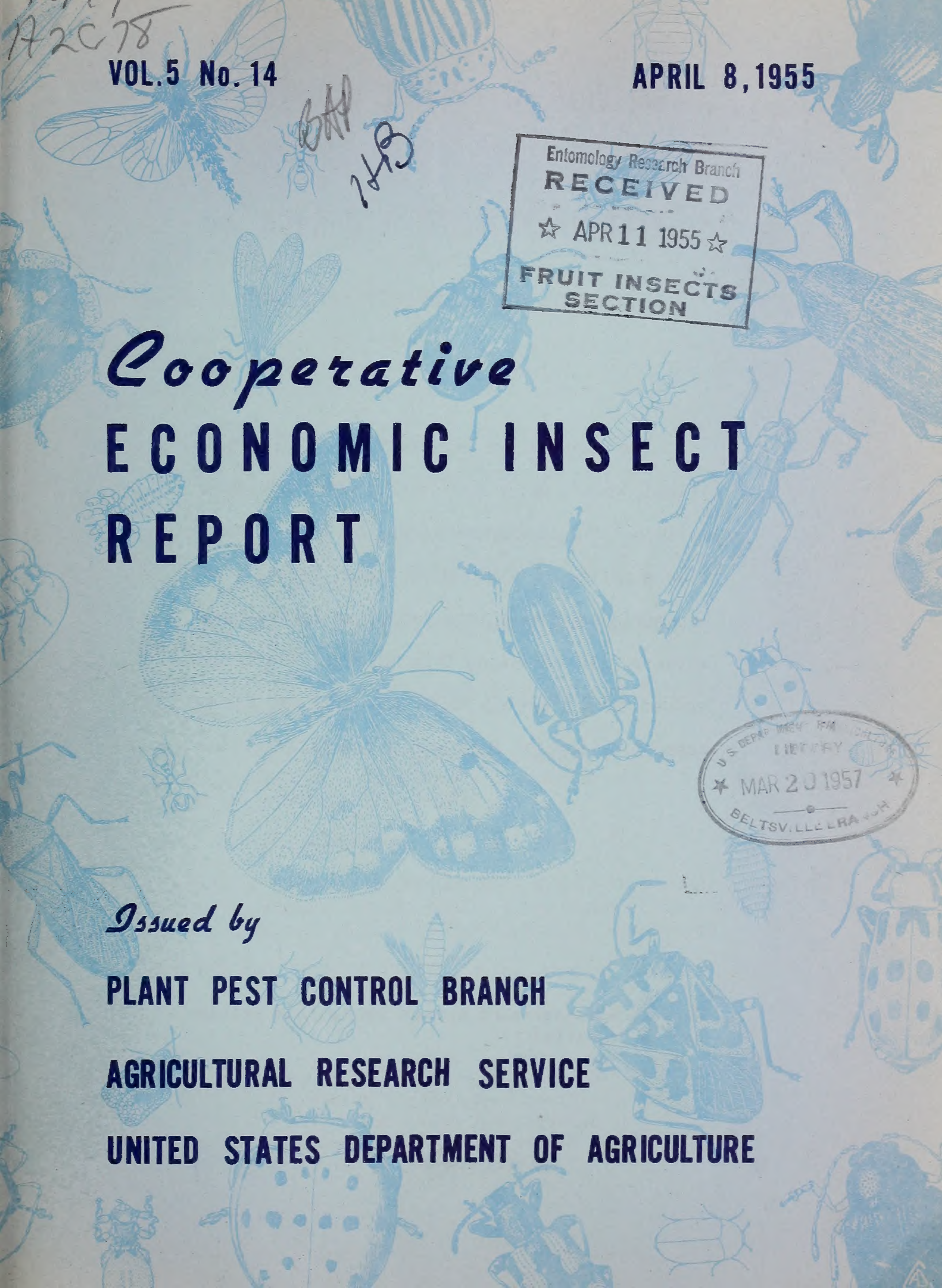

VOL.5 No. 14 APRIL 8, 1955

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FRUIT INSECTS SECTION

Cooperative
ECONOMIC INSECT REPORT

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AGRICULTURAL RESEARCH SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE

PLANT PEST CONTROL BRANCH

ECONOMIC INSECT SURVEY SECTION

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Branch serves as a clearing house and does not assume responsibility for accuracy of the material.

Reports and inquiries pertaining to this release should be mailed to:

Economic Insect Survey Section
Plant Pest Control Branch
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Volume 5 April 8, 1955 No. 14

COOPERATIVE ECONOMIC INSECT REPORT

Highlights of Insect Conditions

GREENBUG infestations heavy in Hale, Swisher and Deaf Smith Counties, Texas. Louisiana and Arkansas also report on this pest. (page 289).

ARMYWORM larvae active in Texas, Louisiana and Arkansas. Overwintering larvae found in Missouri. (page 290). Moths recorded as far north as Kentucky. (page 299).

PEA APHID building up on alfalfa in Virginia and Maryland and increasing on vetch in Kaufman County, Texas. Light infestations in Arkansas, Oklahoma and North Carolina. (page 291).

ARMY CUTWORM infestation widespread in south central Kansas. (page 301). Also reported from Box Elder County, Utah. (page 290).

CODLING MOTH emergence expected heavier than usual in Virginia. (page 293).

FRUIT INJURY from cold weather in Indiana, Illinois and Georgia. (page 294).

VEGETABLE WEEVIL infestation general in southeastern area of Louisiana. Also active in some areas of Florida and North Carolina. (page 295).

LIGHT TRAP collections. (pages 299).

Summary of INSECT CONDITIONS - 1954 - in Florida (page 303) and Pennsylvania. (page 308). Also some of the more important insects of 1954 in Pennsylvania. (page 311).

First REPORTED RECORDS for the season. (page 298).

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Reports in this issue are for the week ending April 1, 1955, unless otherwise designated.

WEATHER BUREAU'S 30-DAY OUTLOOK
April 1955

The Weather Bureau's 30-day outlook for April calls for temperatures to average below seasonal normals east of the Appalachians and over the southern half of the nation from Texas eastward. Above normal temperatures are predicted in a belt extending from the Great Lakes westward through the Northern Plains to the Northern Plateau. In areas not specified near normal temperatures are anticipated.

Precipitation is expected to be above normal over the southern third of the country, below normal in the northern third, and about normal in the central third, except for generally above normal amounts along the West Coast.

This report released by the Weather Bureau on April 1, 1955.

Weather forecast given here is based on the official 30-day "Resume and Outlook," published twice a month by the Weather Bureau. You can subscribe through Superintendent of Documents, Washington, D. C. Price: $4.80 a year, $2.40 for six months.

WEATHER FOR THE WEEK ENDING APRIL 4, 1955

Winter relaxed her icy grip on most of the Nation during the week, but record snow falls in the northern Rocky Mountain States and in southern New England during the weekend served notice that cold weather was still a threat to spring activities.

Extreme temperature contrasts characterized the weather east of the Rockies during the period. Arctic air, that had brought record low temperatures to the country as it pushed its way to the Atlantic and Gulf Coast at the beginning of the period, remained over the eastern portion of the country during the first part of the week. This cold air continued to set record low temperatures for this late in the season. Augusta, Ga., reported a temperature of 24° on the 29th, and 28° on the 30th. As the Arctic air moved eastward, the southerly winds behind it brought temperatures in the 70's back to the country as far north as North Dakota. The mild temperatures were very favorable for seasonal farm operations. Temperatures for the week remained below normal in the Southeast, with southern Florida (Weather continued on page 302).

CEREAL AND FORAGE INSECTS

GREENBUG (Toxoptera graminum) - TEXAS - Averages 25-50 per linear foot of row in Farmell area of Parmer County. Widespread infestation in Hale County of 180-200 per foot. Heavy widespread infestation in Swisher County, from 500-2000 greenbugs per foot. From 500-2000 per foot of row in Hereford area of Deaf Smith County. (Gaines). LOUISIANA - Severe infestation on approximately 75 acres of barley, heavily parasitized by Aphidius testaceipes in Tensas Parish. (Oliver).

GRASSHOPPERS - OKLAHOMA - Survey March 28-31 in western tier of counties indicated considerable mortality of grasshopper eggs from desiccation and parasitism. (Flora).

CHINCH BUG (Blissus leucopterus) - KANSAS - Beginning to move from winter quarters to nearby fields of wheat and barley in infested portions of Elk and Montgomery Counties. (Frazier).

LESSER CORNSTALK BORER (Elasmopalpus lignosellus) - FLORIDA - Second and third instar larvae collected from corn in experimental planting at Gainesville. First report of season for this area. (Thames).

SALT-MARSH CATERPILLAR (Estigmene acrea) - CALIFORNIA - Heavy infestations earlier than normal in Los Angeles County. May need treatment on young grains. (Calif. Coop. Rept., Feb.).

CORN LEAF APHID (Rhopalosiphum maidis) - TEXAS - Widespread infestation on barley in Kaufman County. (Simmons). OKLAHOMA - Still restricted to counties along the Red River. (Bower, Henderson).

BROWN WHEAT MITE (Petrobia latens) - OKLAHOMA - Very numerous in localized areas in Harper and Beaver Counties where wheat is being killed. (Flora).

APHIDS ON GRAIN - ARKANSAS - Small grain fields in the southern half of the State generally infested with one or more species. English grain aphid, corn leaf aphid, greenbug and unidentified aphid in numbers up to 150-200 per foot of tiller row. No observable damage. Parasitism and predatism heavy, particularly in southwestern counties. (Warren).

ARMYWORM (Pseudaletia unipuncta) - TEXAS - Medium local infestation on vetch in Kaufman County. (Randolph). ARKANSAS - Light infestations on small grains in Union, Ashley and Chicot Counties. No damage. (Warren). LOUISIANA - From 1-5 larvae per 100 sweeps of 12 inch net in oats in Tensas, Rapides and Avoyelles Parishes. (Oliver). MISSISSIPPI - Low temperatures will probably cause delay in infestations. (Ins. Survey and Forecast). MISSOURI - A very few fourth instar larvae were found in west central area indicating the successful overwintering of this species in Missouri. (Kyd, Thomas).

VARIEGATED CUTWORM (Peridroma margaritosa) - TEXAS - Medium widespread infestation in vetch in Kaufman County. (Randolph). ARKANSAS - Light in grain fields in Chicot and Ashley Counties. (Warren).

ARMY CUTWORM (Chorizagrotis auxiliaris) - UTAH - From 1 per square foot to 1 per square yard on range at Promontory Point, Box Elder County. May have injury to range and possibly to farms. (Dorst).

SOUTHWESTERN CORN BORER(Diatraea grandiosella) - MISSOURI- overwintering survival in west central area ranges from 5 to 15 percent. Successful survival increasesin southern part of infested area and ranges from 25 to 55 percent in extreme southwest corner. (Kyd, Thomas).

SUGARCANE BEETLE (Euetheola rugiceps) - LOUISIANA - Light general widespread infestation in the sugarcane belt in St. Mary Parish. (Oliver).

SUGARCANE BORER (Diatraea saccharalis) - LOUISIANA - Considerable activity in sugarcane. (Oliver).

CRANE FLY LARVAE - MISSOURI - Counts of 0.5 to 2 per square foot common in meadows, drought injured pastures and waste land areas in central Missouri. (Kyd, Thomas).

ALFALFA WEEVIL (Hypera postica) - NEVADA - Adults active; breeding and egg laying in western counties. Limited adult control in most valleys. (Gallaway, Mar. 26). MARYLAND - Adults average 4 per 20 sweeps in alfalfa fields in Queen Annes and Talbot Counties. Egg laying underway. (U. Md., Ent. Dept.).

EGYPTIAN ALFALFA WEEVIL (Hypera brunneipennis) - ARIZONA - Ten to 12 larvae per 100 sweeps in 2 fields in Yuma area; generally light in region. Heavy on 80 acres at Phoenix and light to heavy on 80 acres at Litchfield Park. (Ariz. Coop. Rept.).

CLOVER LEAF WEEVIL (Hypera punctata) - NEVADA - Active in many alfalfa fields in western area, March 26. (Gallaway). MISSOURI - Larvae, all stages, becoming prevalent in clover and alfalfa over State. Counts of 0.5 to 4 per crown of red and ladino clovers and 0.1 to 2 per crown of alfalfa. Five - 10 percent of larvae have fungus disease. (Kyd, Thomas). ILLINOIS - Eight per square foot in one clover field in Champaign County. (Petty).

LESSER CLOVER LEAF WEEVIL (Hypera nigrirostris) - MARYLAND - Adults in small numbers in alfalfa in Talbot County. (U. Md., Ent. Dept.).

MEADOW SPITTLEBUG (Philaenus leucophthalmus) - MARYLAND - Hatching on weeds on sunny ditch bank near alfalfa fields, Queen Annes County, March 31. (U. Md., Ent. Dept.).

YELLOW CLOVER APHID (Myzocallis trifolii) - CALIFORNIA - Infested area in Los Angeles County increasing. Infestations light over much of Imperial County. (Calif. Coop. Rept., Feb.). NEVADA - Steady increase in population over areas in Clark County infested during 1954. Now appears that control will be required on first cutting. (Goff, Mar. 26). ARIZONA - General throughout Yuma area March 24. Also causing medium to severe damage to 1000 acres in the Marana area. (Ariz. Coop. Rept.). OKLAHOMA - Small numbers along northern border from Harper and Nowata Counties and in damaging numbers throughout rest of central and western areas. Temperatures as low as six degrees did not appreciably reduce populations. (Flora, Stiles, Rogers, Howell).

CLOVER MITE (Bryobia praetiosa) - ARIZONA - Causing damage in a few alfalfa fields at Yuma, March 24. More fields of wheat with noticeable damage in this area. (Ariz. Coop. Rept.). MISSISSIPPI - Feeding on clover in Covington County. (Hutchins).

PEA APHID (Macrosiphum pisi)- TEXAS - Medium widespread infestation on vetch in Kaufman County. Increasing. (Randolph). ARKANSAS - Very light on alfalfa and Austrian peas. (Warren). OKLAHOMA - Small numbers in alfalfa in north Oklahoma. Predators and parasites very common. (Flora, Bieberdorf, Bryan). VIRGINIA - Populations increasing in alfalfa over State and will be causing damage in one or two weeks if natural control factors do not develop. Population of 500 per 100 sweeps in alfalfa in a Brunswick County field. (Morris). Heavy on alfalfa in a Roanoke County field. (Keaton). NORTH CAROLINA - Light infestation on alfalfa in Guilford County. (Jones). MARYLAND - Building up on alfalfa in Queen Annes and Talbot Counties. From 6 to 25 per sweep. (U. Md., Ent. Dept.).

CUTWORMS - OKLAHOMA - Active in isolated areas in alfalfa fields over much of State. Extensive damage in limited areas. (Stiles).

CLAY-BACKED CUTWORM (*Agrotis gladiaria*) - MISSOURI - Generally widespread over southern two-thirds of State with numbers reaching economic importance in red and ladino clovers and some pastures. Counts from 0.4 per square yard in pastures to 7 per square yard in clovers. Largely third and fourth instars. (Kyd, Thomas).

SOUTHERN CORN ROOTWORM (*Diabrotica undecimpunctata howardi*) - LOUISIANA - Eight per 100 sweeps of 12 inch net in California burclover in Avoyelles Parish. Lighter in Tensas Parish. (Oliver).

A SPIDER MITE (*Tetranychina apicalis*) - LOUISIANA - Moderate to heavy on white clover in St. Landry Parish. (Oliver).

TOBACCO THRIPS (*Frankliniella fusca*) - LOUISIANA - Light to moderate in white clover in St. Landry and Livingston Parishes. (Oliver).

YELLOW STRIPED ARMYWORM (*Prodenia ornithogalli*) - TEXAS - Medium local infestation on vetch in Kaufman County. (Randolph).

GREEN CLOVERWORM (*Plathypena scabra*) - LOUISIANA - Twelve per 100 sweeps of 12-inch net on California burclover in Avoyelles Parish, 47 per 100 sweeps in alfalfa in Tensas Parish. (Oliver).

LYGUS BUGS - ARIZONA - Six to 10 lygus bugs per 100 sweeps at Yuma March 24, apparently becoming more abundant. (Ariz. Coop. Rept.). LOUISIANA - Eight nymphs and 4 adults per 100 sweeps in alfalfa in Tensas Parish; 44 adults, 41 nymphs per 200 sweeps in Rapides Parish. (Oliver).

POTATO LEAFHOPPER (*Empoasca fabae*) - LOUISIANA - One in 200 sweeps of alfalfa in Rapides . One specimen also taken in 200 sweeps in alfalfa in Lecompte , March 25 , and two in burclover in Natchitoches , March 24. (Oliver).

FRUIT INSECTS

CODLING MOTH (*Carpocapsa pomonella*) - VIRGINIA - Overwintering larvae in central and southern areas numerous under bark of trees. Spring brood moth emergence expected to be heavier than normal. (Morris).

TARNISHED PLANT BUG (*Lygus lineolaris*) - VIRGINIA - First of season jarred from peach trees on March 25. (Morris).

WALNUT SCALE (*Aspidiotus juglans-regiae*) - CALIFORNIA - Heavy on peach trees and reported in San Bernardino County. (Calif. Coop. Rept., Feb.).

APHIDS - NEW YORK - A fair number of grain aphids hatched by March 31. (Wkly. News Lett.). VIRGINIA - Populations of green peach aphid (*Myzus persicae*) and rosy apple aphid (*Anuraphis roseus*) extremely low in central area fruit orchards. Hatching complete. (Morris).

PEAR PSYLLA (*Psylla pyricola*) - OREGON - Adults active and laying eggs on pear in Benton County. (Jones).

RED-BANDED LEAF ROLLER (*Argyrotaenia velutinana*) - VIRGINIA - A few adults emerging. Damage by first brood likely in several orchards in Albemarle County. (Morris).

EUROPEAN FRUIT LECANIUM (*Lecanium corni*) - CALIFORNIA - Medium to heavy infestations in many apricot orchards in San Joaquin County. (Calif. Coop. Rept., Feb.).

CITRUS RED MITE (*Metatetranychus citri*) - CALIFORNIA - Light but troublesome infestation in citrus orchards in San Diego County, light to medium in San Bernardino County, light to heavy in coastal citrus orchards in Santa Barbara County. Control used. (Calif. Coop. Rept., Feb.).

SOFT SCALE (*Coccus hesperidum*) - CALIFORNIA - Some severe infestations in Tulare County citrus. (Calif. Coop. Rept., Feb.).

YELLOW SCALE (*Aonidiella citrina*) - CALIFORNIA - Light to severe infestations in Tulare County citrus, control used. Spot infestation of great numbers found in a Glenn County citrus planting. (Calif. Coop. Rept., Feb.).

CITRICOLA SCALE (*Coccus pseudomagnoliarum*) - CALIFORNIA - Light to severe infestations in Tulare County citrus. (Calif. Coop. Rept., Feb.).

OLIVE SCALE (Parlatoria oleae) - CALIFORNIA - Medium to heavy infestations in olive orchards and ornamental plants in Tulare County. Control used. (Calif. Coop. Rept., Feb.).

GRAPE MEALYBUG (Pseudococcus maritimus) - CALIFORNIA - Severe infestations in Tulare County vineyards, control used. Light overwintering populations in Fresno County vineyards. (Calif. Coop. Rept., Feb.).

Fruit Injury from Cold Weather in Indiana, Illinois and Georgia:

In the Goshen area of Indiana total fruit bud kill ranged between 50 and 85 percent for peaches and 15 to 70 percent for cherries. Apple buds appeared to withstand the freeze except for Jonathan which had a kill of 30 to 65 percent. In the Vincennes area the percent of remaining live buds of various apple varieties ranged from 0 to 74. (Hamilton). In the Orleans area of the State 50 to 99 percent of the peach fruit buds and 84 to 100 percent of the apple buds of most varieties were killed. Cherries at present show that every bud has more injured blooms than uninjured. Accurate estimates of fruit damage cannot be determined at present time. (Marshall). In southern Illinois there are practically no live buds of peach south of Centralia and scarcely none of apple south of Carbondale. In the area south of Carbondale there is practically no fruit left to develop. (Chandler). The peach crop of Georgia apparently has been entirely wiped out for the first time since 1899. (Snapp).

TRUCK CROP INSECTS

VARIEGATED CUTWORM (Peridroma margaritosa) - CALIFORNIA - Considerable injury to cabbage in Orange County. Control used. (Calif. Coop. Rept.).

IMPORTED CABBAGEWORM (Pieris rapae) - MARYLAND - Few butterflies on the wing at Brinklow, April 3. (U. Md., Ent. Dept.).

COLORADO POTATO BEETLE (Leptinotarsa decemlineata) - SOUTH CAROLINA - First eggs noted on potatoes in the Charleston area on March 25. No larvae found to March 31. (Reid).

TOBACCO FLEA BEETLE (Epitrix hirtipennis) - VIRGINIA - Damage very light to plants in one of two plant beds in Mecklenburg County. Three adults in beds in Brunswick County but some seen in Mecklenburg County beds. (Morris, Osborne). NORTH CAROLINA - Moderate infestations of tobacco plant beds in Sampson and Yadkin Counties. (Scott).

MIDGES - NORTH CAROLINA - Severe infestation of midge larvae (not Smittia) of a tobacco plant bed in Bertie County. Twenty larvae found in a 2-inch soil sample, at a 3-inch depth. Most plants killed. (Gurhrie, Rabb, Scott). Moderate to light infestations of midge larvae (probably Smittia sp.) in Forsyth, Johnston, Sampson and Yadkin Counties. (Scott).

GRUBS - NORTH CAROLINA - Moderate to light infestations of probably Cotinis nitida in tobacco plant beds in Johnston and Lee Counties. (Scott).

CRANE FLIES - NORTH CAROLINA - Light to moderate infestation of larvae in tobacco plant beds in Hertford, Lee and Yadkin Counties. (Scott).

CUTWORMS - NORTH CAROLINA - Light infestation of tobacco plant beds in Sampson County. (Morgan). MISSISSIPPI - Reports of heavy infestations in onions, corn and gardens from south and central areas. Low temperature may delay infestations, however. (Insect Survey and Forecast).

APHIDS - NORTH CAROLINA - Light infestation of probably Myzus persicae in tobacco plant beds in Sampson County. (Morgan).

VEGETABLE WEEVIL (Listroderes costirostris obliquus) - NORTH CAROLINA - Moderate infestation of tobacco plant beds in Sampson County. (Morgan). FLORIDA - Averaging 5 larvae, pupae, adults per turnip plant in one area in Jackson County. Infesting tomato plants at Marianna. Control recommended. (Lamb). LOUISIANA - General widespread infestation in southeastern area. Severe damage in 2 fields of peppers, 1-2 adults on 25 percent of plants. Ten per plant on strawberries in Livingston Parish. (Oliver).

SEED-CORN MAGGOT (Hylemya cilicrura) - TENNESSEE - Infesting potatoes in Middle Tennessee. (Mullett). OKLAHOMA - Adult activity and larval populations on spinach foliage greatly reduced during past 10 days by low temperatures. By March 31, flies common in fields and 10 to 20 percent of plants contained eggs. (Walton).

GREEN PEACH APHID (Myzus persicae) - ARIZONA - Light on wrapper leaves of lettuce in several fields at Yuma, March 24. (Ariz. Coop. Rept.). FLORIDA - Averaged 4 to 5 nymphs and adults per Irish potato plant in Alachua County. This aphid is rather widely scattered over the potato-growing areas of Alachua and Saint Johns Counties. (Hunter).

THRIPS - NEVADA - Economic population of onion thrips present in green onion field in Clark County. (Gallaway, Mar. 26).

A SPITTLEBUG (Aphrophora sp.) - LOUISIANA - In one field of Tangipahoa Parish on 75 percent of strawberry plants in shaded areas. (Oliver).

A STRAWBERRY PAMERA (Pachybrachius sp.) - TEXAS - Heavy local infestation of this lygaeid on strawberries in Jefferson County. (Fuller).

STRAWBERRY APHID (Capitophorus fragaefolii) - CALIFORNIA - In damaging numbers in strawberry fields of Orange and Los Angeles Counties, in both old and new plantings. Control applied. (Calif. Coop. Rept., Feb.).

SPIDER MITES (Tetranychus spp.) - LOUISIANA - T. bimaculatus and T. desertorum in several fields of strawberries in Tangipahoa Parish. (Oliver). CALIFORNIA - Infestations of T. bimaculatus in small fruit in southern area increasing. (Calif. Coop. Rept., Feb.).

COTTON INSECTS

Cotton Insect Situation, Lower Rio Grande Valley, Texas: Damaging numbers of THRIPS in cotton fields adjacent to onions. CUTWORMS in all areas, particularly where cotton follows leafy vegetables. SPIDER MITES in destructive numbers in a few fields before the cold weather. BOLLWORM found feeding on terminal bud of seedling plants. (Wene, Dean, Fuller).

DARKLING BEETLES (Blapstinus spp.) - TEXAS - Medium local infestation on cotton in Nueces County. (Nolan).

INSECTS AFFECTING OTHER FIBER PLANTS

BOLLWORM (Heliothis armigera) - TEXAS - Light, medium to heavy widespread infestation on flax in Refugio County. Feeding on green pods. 15,895 per acre in one count near town of Bayside March 24. (Smith, Sherrer, Greer).

FOREST, ORNAMENTAL AND SHADE TREE INSECTS

FALL WEBWORM (Hyphantria cunea) - FLORIDA - First-instar larvae in small webs on sweet gum in Alachua County. (Hetrick).

BARK BEETLES - ARKANSAS - *Ips* sp. and *Dendroctonus terebrans* active in isolated areas but not causing any serious damage. (Warren).

PINE SAWFLIES (*Neodiprion* sp.) - ARKANSAS - Infestations have practically disappeared in south Arkansas pine forests. (Warren).

COTTONWOOD LEAF BEETLE (*Chrysomela scripta*) - FLORIDA - All stages present in numbers on foliage of willows in Alachua County. (Hetrick).

DUSKY BIRCH SAWFLY (*Croesus latitarsus*) - FLORIDA - First to third instar larvae on river birch trees in Alachua County. (Hetrick).

WHITE-MARKED TUSSOCK MOTH (*Hemerocampa leucostigma*) - PENNSYLVANIA - Very abundant on roses in greenhouses in Butler County. Defoliating roses in 3 large ranges. (Adams).

A WAX SCALE (*Ceroplastes* sp.) - FLORIDA - Light to heavy on Chinese holly in a Norfolk nursery. (Harrell, Morris).

CAMELLIA SCALE (*Lepidosaphes camelliae*) - VIRGINIA - Generally heavy on camellia plants in a Norfolk nursery. (Harrell, Morris).

EUONYMUS SCALE (*Unaspis euonymi*) - VIRGINIA - Light to heavy on *Euonymus* in a Norfolk nursery. (Harrell, Morris).

INSECTS AFFECTING MAN AND ANIMALS

CATTLE GRUBS - UTAH - Moderately numerous in Kane, Weber, Grand and Salt Lake Counties. (Knowlton, et al).

HOUSE FLY (*Musca domestica*) - VIRGINIA - Becoming active over State. (Morris).

MOSQUITOES - UTAH - First and second instars in a few breeding ponds in Weber and Salt Lake Counties. (Fronk, Rees).

CATTLE LICE - UTAH - Severe in Kane County with only about 1500 hundred head of cattle known to have been treated. (Rose, Knowlton). Many herds in Salt Lake County need control. (Parrish, Knowlton).

SHEEP SCAB MITE (*Psoroptes equi* var. *ovis*) - VIRGINIA - Detected on 269 of 982 head inspected by veterinarians in Virginia during March. Total of 474 sheep dipped for infestations. (Livestock Health Bull.).

BROWN DOG TICK (*Rhipicephalus sanguineus*) - UTAH - Engorged specimen taken from a dog at Ogden December 10, 1954. Det. H. Sollers. (Knowlton).

STORED-PRODUCT INSECTS

STORED-GRAIN INSECTS - CALIFORNIA - Granary weevil (*Sitophilus granarius*) and saw-toothed grain beetle (*Oryzaephilus surinamensis*) infestation in sacked barley and oats light to heavy in Colusa County. (Calif. Coop. Rept., Feb.).

KHAPRA BEETLE (*Trogoderma granarium*) - CALIFORNIA - Known infestations have been recorded from 16 counties as follows: Alameda 2, Colusa 22, Fresno 10, Glenn 2, Imperial 41, Kern 19, Kings 3, Lake 4, Los Angeles 3, Madera 1, Riverside 3, San Bernardino 1, San Francisco 1, Tulare 5, Butte 3 and Sutter 1. Of the more than 4,000 properties inspected, less than 4 percent were found infested. Many infestations of grain found most recently are on farms where the grain is being held for feeding or planting and is not a factor in further outward spread, except as the used bags get back in channels of trade. Control over the disposition of these bags is being carefully handled by county agricultural commissioners. (Calif. Coop. Rept., Feb.).

DIPTEROUS LARVAE - TEXAS - Heavy local infestation in silage in Cottle County. (Clayton).

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First Reported Records of Season (by areas):

MEADOW SPITTLEBUG hatching, March 31, in Maryland; LESSER CORNSTALK BORER larvae Florida; COLORADO POTATO BEETLE eggs, March 31, South Carolina; IMPORTED CABBAGEWORM adults, April 3, Maryland; RED-BANDED LEAF ROLLER adults in Virginia; TARNISHED PLANT BUG adults, March 25, Virginia.

LIGHT TRAP COLLECTIONS

		P. unipuncta	A. ypsilon	P. ornithog.	F. subterr.	H. armigera	P. margar.	P. sexta
MISS. (counties)								
Humphreys	3/25-4/1	135	12	1	6		18	
Pearl River				1	1	1		
Oktibbeha		1		1			1	
Coahoma		12					9	
TENN. (counties)								
Shelby	3/23-30	19	4	2			3	
Madison		15	2					
Lawrence		1						
Maury		8	4	1			5	
Robertson		3	2	2			2	
Greene		8	2	2				
TEXAS								
Weslaco	3/1-31	41	457	29		483		36
ARKANSAS								
Stuttgart	3/25-4/1	7	2					
Fayetteville			1				2	
LA.								
Baton Rouge	3/16-26	114	8	26	75	4		
Franklin	3/1-22	49	76	21	52	4	3	
St. Joseph	3/11-21	23	5		19		1	
Tallulah	3/25-4/1	58	23	1	2		10	

Other collections of importance: TENN. Agonoderus lecontei 12, Caenurgina erechtea 14; TEXAS-(Weslaco) Celerio lineata 712; KENTUCKY - Since March 15 a few P. unipuncta moths have been taken in 5 traps in south-western part of the State. LOUISIANA -(Baton Rouge) Mocis latipes 26, Empoasca fabae 1, Euetheola rugiceps 78; (St. Joseph) Euetheola rugiceps 5; (Tallulah) Laphygma exigua 37, Estigmene acrea 2, Loxostege similalis 4 ;(Franklin) Heliothis sp. 3, Agrotis malefida 6, Diatraea saccharalis 24, E. rugiceps 60. Also Phyllophaga 1264 at Baton Rouge.

RECENT IMPORTANT INTERCEPTIONS AT PORTS OF ENTRY

Living eggs, larvae and pupae of the citrus blackfly, Aleurocanthus woglumi , were intercepted recently in baggage from Mexico on Calamondin (Citrus mitis) leaves and on sour lime leaves at Nogales, Arizona. (Ehringer, Westover) and on citrus leaves at San Antonio, Texas. (Johnston). This insect is considered an important pest of citrus and many subtropical plants in Mexico, parts of Central America, the West Indies and the Orient. Injury is caused by the larvae feeding on the underside of the leaves. This impairs the vitality of the tree, hinders growth and affects the quality of the fruit. Additional injury results from the development of sooty mold in the honeydew excretions of the insect that blackens the foliage and mars the appearance of the trees.

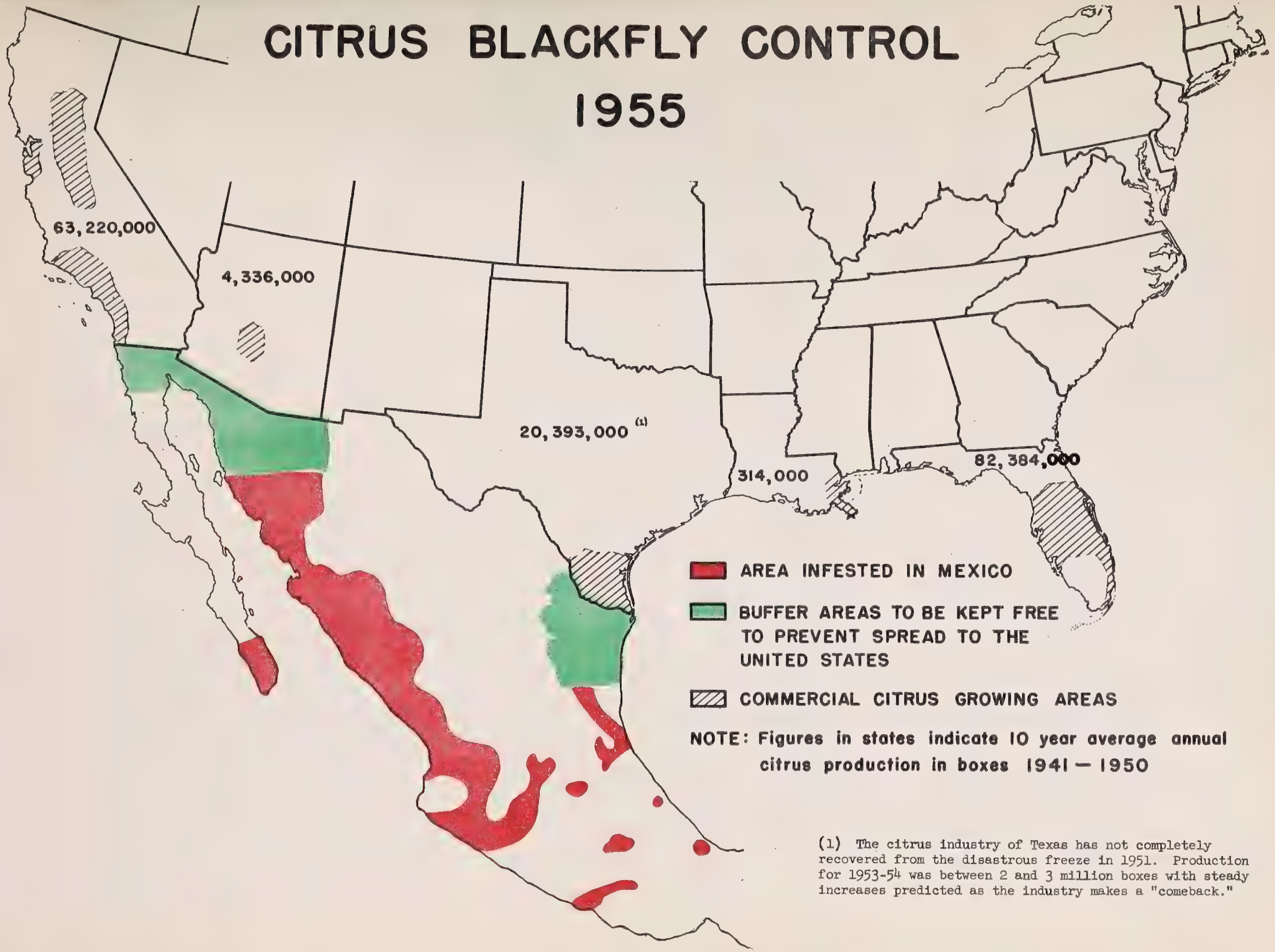
Observations on the biology of the citrus blackfly in the Canal Zone indicate that there are 3-6 generations a year with considerable overlapping of various stages. The eggs are deposited in spirals of 30-50 on the underside of the leaves, each female depositing about 100 eggs. Eggs hatch in 11-20 days. There are 3 larval instars; 7-16 days; 5-34 days; 6-20 days; and a pupal stage of 16-80 days. Adults may live 6-12 days. The eggs are canoe-shaped with rounded ends; larvae and pupae black, oval, shiny, and sparsely adorned with black spines; and adults dark brown with smoky wings marked with a white cross.

Over 150 hosts have been reported for the citrus blackfly. Preferred and most important are various species of citrus, mango, coffee, myrtle, cherimoya, sapote, persimmon, pear and quince. This insect is said to occur in Africa, Bahamas, Burma, Ceylon, China, Canal Zone, Costa Rica, Cuba, Haiti, India, Indo-China, Jamaica, Java, Malaya, Mexico, Nicaragua Panama, Philippines, Siam, Straits Settlements, and Sumatra. It is not known to occur in the United States, (Compiled-Plant Quarantine Branch).

The map, prepared by Plant Pest Control Branch, on next page shows distribution of this insect in Mexico.

CITRUS BLACKFLY CONTROL

1955


63,220,000
4,336,000
20,393,000 (1)
314,000
82,384,000
🟥 AREA INFESTED IN MEXICO
🟩 BUFFER AREAS TO BE KEPT FREE TO PREVENT SPREAD TO THE UNITED STATES
▨ COMMERCIAL CITRUS GROWING AREAS

NOTE: Figures in states indicate 10 year average annual citrus production in boxes 1941 — 1950

(1) The citrus industry of Texas has not completely recovered from the disastrous freeze in 1951. Production for 1953-54 was between 2 and 3 million boxes with steady increases predicted as the industry makes a "comeback."

1-21-55

MISCELLANEOUS INSECTS

COLLEMBOLA - NORTH CAROLINA - Severe infestation in earthworm culture in Guilford County. (Jones, Farrier).

SOUTHERN LYCTUS BEETLE (Lyctus planicollis) - MISSISSIPPI - Adults emerging from oak floors in Humphreys and Prentiss Counties. (Hutchins, Cochran).

OLD HOUSE BORER (Hylotrupes bajulus) - PENNSYLVANIA - Found in houses in Lycoming and Perry Counties. (Gesell, Pepper).

ADDITIONAL NOTES

GEORGIA - PLUM CURCULIO appearance to March 25 less than that of an average year. (Snapp). Heavy damage to onions and seed potatoes in Spalding and Butts Counties, March 24 by SEED-CORN MAGGOT. (Beckham).

KANSAS - Fifteen counties of central and south central Kansas were survyed to determine the presence of APHID infestations and other insects that might affect wheat, barley, and oats. Minor infestations of no economic significance were found in a few wheat fields of Marion and Chautauqua Counties. Counts of these aphids averaged 2 to 5 per twenty-five sweeps of a 15-inch net. No GREENBUGS were found; the species collected all appeared to be ENGLISH GRAIN APHIDS. ARMY CUTWORM was found in nearly all fields examined in south central counties. Populations ranging from 1 to 8 larvae per square foot were common in most alfalfa fields in this area. Counts in wheat, barley, and oats from 1 to 5 larvae per yard of drill row. Many fall-seeded alfalfa fields in Cowley, Sumner, Sedgwick, Harvey, Butler, and Reno Counties require immediate control applications to prevent any further loss of stand. Many old stands of alfalfa in these counties will require frequent examination to determine need for insecticides to protect against loss of a part of the first hay crop. (Matthew).

reporting temperatures near January levels. Above normal temperatures returned to the North Central region extending as far south as the Texas Panhandle and the Ohio River Valley. New England and California reported near-seasonal temperatures for the week, but the Pacific Northwest had temperatures a little below normal during the period.

Except for a few areas of locally heavy amounts, most of the Nation received little or no precipitation during the period. Rain occurred every day of the week in the Pacific North West with accumulated amounts of up to 4 inches recorded along the coast. Precipitation was light in the inland areas of this region, but was beneficial to crops. Rain on the 31st and 1st brought heavy amounts of moisture to the Tennessee, northern Alabama, northern Mississippi area for the third straight week. Beneficial rains occurred in the dry region of the Gulf Coast on the 1st. New Orleans reported 0.46 inches which was the heaviest rain there since February 22nd. Galveston, Tex., recorded 2.73 inches of rain in 6 hours during the morning of the 1st.

Snowfall, accompanying the passage of a cold front on the 2nd and 3rd, brought 1 to 2 inches of moisture to north central Wyoming and south central Montana. This was one of the most severe spring storms of record in this area. Salt Lake City, Utah reported 12.8 inches of snow which was a record fall for April. Many main highways were blocked by drifting snow, and some difficulty was reported in keeping communications open. Another severe snow storm occurred on the 3rd in southern New England. This was the heaviest snow of the year for this region, with amounts of up to 20 inches being reported. This storm was centered in western Massachusetts, southern Vermont and northwestern Connecticut.

Strong winds were reported during the latter part of the week from Arizona and western Texas to North Dakota and Minnesota. These winds brought severe dust storms to the area resulting in heavy soil erosion losses. Winds of 50-70 mph for periods of 8 to 12 hours were reported in South Dakota on the 3rd. These winds also caused some structural damage in western Iowa. (Summary Supplied by U.S. Weather Bureau).

SUMMARY OF INSECT CONDITIONS - 1954

FLORIDA

Reported by H. A. Denmark

Cereal and Forage Insects:
GRASSWORMS (Mocis spp.) were reported from the southern part of the State in May and June on pasture grasses and cover crops. Damage was quite heavy ranging from 3 to 20 per square foot on millet, Bahia, Bermuda, St. Augustine and Pangola grasses and sugarcane. The infestations moved to the central, north, and western areas as the season progressed. This pest was active as late as December as a report was received from the northern part of the State that grassworms were feeding on Pangola grass at the rate of 23 per square foot. A CHINCH BUG (Blissus leucopterus insularis) caused light to medium damage to lawns in the southern part of State in January; small patches found infesting St. Augustine grass. Up to 300 per square foot in the southern area in July and August, and by this time the insect had spread to all parts of the State. A SOD WEBWORM (Pachyzancla phaeopteralis) was first reported from the south-central area on St. Augustine and Bermuda grass, averaging 2 larvae per square foot in June. By the last of July it had spread to the north-central part of the State with populations up to 40 per square foot. This is a troublesome pest as controls must be made every 10 days to two weeks in the active season. RHODES-GRASS SCALE (Antonina graminis) is present the year around in the southern part of State on grasses. Populations up to 300 per square foot reported from Key West in July. The scale was reported from Gainesville on St. Augustine grass for the first time in November. YELLOW SUGARCANE APHID (Sipha flava) is a pest of pasture grasses over State. First reports in April were from the south on Pangola grass averaging 25 per square foot. Populations continued to increase up to 500 per square foot at Clewiston in April and May. By June natural enemies had reduced population to a moderate infestation.

VELVETBEAN CATERPILLAR (Anticarsia gemmatilis) - The first infestation was reported on soybeans at Belle Glade in June. By July losses of 15 to 20 percent of soybean crops were reported from the northwestern area. Infestations ranging from 1 to 5 per plant in all areas through November on soybean, velvetbeans, hairy indigo and beans. FALL ARMYWORM (Laphygma frugiperda) averaged 60 per square foot on Bermuda grass in northern area in September. Scattered infestations of 85 and 125 per square foot also reported. All reports but one came from north and central parts of State. LESSER CORNSTALK BORER (Elasmopalpus lignosellus) is usually considered a minor pest, however, it was severe over the State this past year due to dry weather. Infestations up to 50 percent reported on corn in western area in August and September. An average of 5 per peanut plant was reported from this same area in September. Stands of corn were reduced up to 30 percent in the Boynton and Pahokee areas in November with some fields replanted. A 30 percent infestation of blue lupine in central area in December. CORN EARWORM (Heliothis armigera) infestations in the Pahokee and Belle Glade areas were as high as 35 percent in untreated fields of sweet corn in March, 80 percent in April, and 100 percent in May. Infestations were considerably lower than this in treated fields. Up to 75 percent infestations in scattered plantings in the northern area in June and July on treated field corn. One to 20 percent infestations on millet in the north and western areas in September and November. A SCALE (Targionia sacchari), commonly found on lawns and pastures in the southern area the year round, caused considerable reduction in growth in areas of high infestations. SOUTHERN GREEN STINK BUG (Nezara viridula) is usually a pest of minor importance over State, and is controlled largely by its natural enemies. Infestations up to 10 per soybean plant in Belle Glade area in June and scattered infestations up to 25 percent of soybean plants in central area in October and November. RED-LEGGED GRASSHOPPER (Melanoplus femur-rubrum) caused some damage on pasture grasses and peanuts in north and western areas; up to 10 and 20 per square yard on Bahia grass at Quincy. Only a few infestations required control. SOUTHERN ARMYWORM (Prodenia eridania) was injuring hegari in June in the Everglades and control was necessary. Some light infestations on pastures in the northern area in September. RICE STINK BUG (Solubea pugnax) was collected in considerable numbers on seed heads of rice in the Everglades in June. Also reported from scattered central and southern areas on pasture grasses.

A GRASS SCALE (Odonaspis ruthae) averaged up to 1,000 per square foot on grasses in southern area in the summer months. Most grasses survive the infestations with only a reduction in growth. LUPINE MAGGOT (Hylemya lupini)- Early infestations in January and February caused considerable reduction in growth in some plantings in the north and western parts of the State. AMERICAN GRASSHOPPER (Schistocerca americana) was not the problem it usually is on corn, soybeans, peanuts, and pasture grasses in the Gainesville area. BLUEGRASS WEBWORM

(Crambus teterrellus) infested lawns in the spring and early summer over State. Averaged 30 to 40 per square foot on Bermuda grass in the Gainesville area in February. By November, reports were general from south to north. RED-NECKED PEANUTWORM (Stegasta bosquella) was a pest on peanuts during midsummer and early fall in the north and western areas. Average of 15 percent of the peanuts in the Gainesville area infested in September and October. YELLOW-STRIPED ARMYWORM (Prodenia ornithogalli) infested soybeans in the northern area at the rate of 2 to 5 percent in November.

Fruit Insects (other than citrus):
RED-BANDED THRIPS (Selenothrips rubrocinctus) averaged 1 to 15 per square inch of leaf surface on avocado, guava, and mango in the Homestead area in July. Also reported from Bartow area in October. A TORTRICID (Platynota stultana) was infesting avocados at rate of 50 to 75 per tree in August at Homestead. Severe damage to lychee on the panicles and young fruit. FALL WEBWORM (Hyphantria cunea) was first observed on pecan trees at Monticello last of April. Light infestations from this area in May. BLACK PECAN APHID (Melanocallis caryaefoliae) was light to medium in July and August at Monticello.

Truck Crop Insects:
SERPENTINE LEAFMINERS (Liriomyza sp.) were reported on potatoes, tomatoes, beans, and squash (0 to 6 per plant) in March from Dade County. Much higher populations in Palm Beach County. Also reported infesting crops in south and central areas from March to November, but no heavy damage. CABBAGE LOOPER (Trichoplusia ni) caused severe damage in Sanford area in late-maturing cabbage fields middle of April. From 2 to 6 per cabbage plant in southern part of the State from last of April to June 1. A virus gave complete control in the Belle Glade area by middle of June. CABBAGE APHID (Brevicoryne brassicae) caused severe damage to crucifers in the Everglades area in November. GREEN PEACH APHID (Myzus persicae) was a pest on the spring crop of potatoes in Hastings area. Control measures necessary. Pepper was generally infested in the central area in April and May. Up to 90 percent of some fields had an average of 10 per plant. GRANULATE CUTWORM (Feltia subterranea) was light to heavy on beets, cabbage, and beans in the Everglades area in April and May. VEGETABLE WEEVIL (Listroderes costirostris obliquus) caused heavy damage to potatoes last of March at Monticello. BANDED CUCUMBER BEETLE (Diabrotica balteata) was abundant on bell pepper at Sarasota in November, and on beans in the Everglades. Considerable injury to beans in Belle Glade area in November. MELON APHID (Aphis gossypii) infested

watermelons generally in the central area in April and May, however, usually controlled. MEXICAN BEAN BEETLE (Epilachna varivestis) was a pest of pole beans, string beans, and lima beans in the north and western areas in May and June. Most infestations below economic level. TOBACCO HORNWORM (Protoparce sexta) was infesting tomatoes moderately at Quincy in June. High populations (20 to 30 per tomato plant) were reported from Immokalee in November. SWEETPOTATO WEEVIL (Cylas formicarius elegantulus) in all stages was reported on sweetpotatoes in the northern and western areas from the last of June through December. Infestations were light to heavy. BEAN LEAF ROLLER (Urbanus proteus) was reported on beans from Belle Glade to west Florida in November causing light to medium damage. Up to 75 percent of beans infested in some fields.

Tobacco Insects:
VEGETABLE WEEVIL damaged up to 10 percent of plants on the margins of tobacco beds in Gadsden County and adjoining areas during June. GREEN PEACH APHID caused light and scattered infestations from the first of April to the last of June in the tobacco-growing area. The highest infestation was at Quincy in April; average of 100 per plant on experimental planting, but commercial plantings were generally free of aphids at this time. Most infestations averaged 6 to 10 percent of the plants infested with 2 to 25 per plant. TOBACCO BUDWORM (Heliothis virescens) was reported the first of April in the Gainesville area. By the middle of April, budworms were reported from all parts of tobacco-growing area, from 2 to 20 per 100 plants. Fifty percent of the small plants north of Gainesville were infested with 1 to 5 larvae by the first of May. Controls were being applied in all cases. Egg deposition was quite heavy in the Suwannee Valley middle of May. Infestations ranged from 5 to 12 percent until the last of May, at which time it rose from 25 to 90 percent. Infestations decreased in June and remained relatively low. TOBACCO HORNWORM (Protoparce sexta) was reported first of April in Gainesville area which is the southern limit of the tobacco growing area. Light infestations (averaging 2 per plant) were kept under control by most growers with regular applications of insecticides through most of April. There was a buildup about the middle of May with some averages as high as 10 to 15 per 10 plants at Quincy and adjoining areas. Infestations were moderately high through May (5 to 20 percent of the plants were infested) with a decline in June. CABBAGE LOOPER (Trichoplusia ni) was reported to be causing light infestations (1 to 1,000 plants) in Quincy the last of April and the first of May.

Cotton Insects:

BOLL WEEVIL (*Anthonomus grandis*) was reported causing light infestations on cotton from the western area in August. Light infestations also reported from small plantings on the lower east coast in August. COTTON APHID (*Aphis gossypii*) caused light infestations, averaging 6 to 16 per plant, in west Florida in June and on the lower east coast in October. LEAF MINERS caused some damage in June. Up to 20 percent of the cotton in west Florida was infested. RED-LEGGED GRASSHOPPER caused light scattered damage to cotton in west Florida.

Forest, Ornamental, and Shade Tree Insects:

The plants listed below are usually infested with one or more insect pests throughout the year regardless of the control program. This report gives the seasonal fluctuation with no attempt to give a monetary loss.

A BARK BEETLE (*Ips calligraphus*) caused light to medium infestations on pines in the central, north, and west in June, July, and August. Increases in abundance in the western part of the State in October and November. PINE WEBWORM (*Tetralopha robustella*) caused some damage to young pine seedlings in the north and north-central areas from June through October. PAPAYA FRUIT FLY (*Toxoptrypana curvicauda*) was not the problem it usually is the Homestead area. GREEN SHIELD SCALE (*Pulvinaria psidii*), which is confined to the southern part of the State, caused damage to various ornamentals during the warmer months. APHIDS (*Toxoptera aurantii* and *Aphis gossypii*) caused varying damage to young growth of many ornamentals. EASTERN LUBBER GRASSHOPPER (*Romalea microptera*) was a pest of shrubs and tender growing plants from March through June. There were heavy buildups of A TEA SCALE (*Fiorinia theae*) on camellia during the months of July and August in the central and northern areas. The SCALE (*Saissetia nigra*) was quite abundant on hibiscus in June, July, and August in the south and central areas. THRIPS (*Frankliniella* sp.) infestations were medium to heavy on flowering plants in April and June in the central and northern areas.

Insects Affecting Man and Animals:

HORN FLY (*Siphona irritans*) was first reported from Gadsden County the first of March averaging 6 per cow. A week later averaged same on a herd of 25 cows in central area. Infestations from 6 to 60 per cow in north-central area April 1. During the same time averages were 3 to 15 in the north, 6 to 100 in the central, and 75 to 125 in the south. The wide difference in averages in the same area was partially due to the regularity in spraying. Infestations continued high (90 to 200 per cow) in the northern area from April to September. Over 400 per head reported in the south in August.

700 to 900/head on cattle in Quincy (north) in November while infestations were considerably lower in the south at this time. SCREW-WORM (*Callitroga hominivorax*) - Every calf dropped in March in the Belle Glade area was infested. Light infestations were reported in the central, north, and western areas in May and June. Most infestations were kept down by treating young calves and wounded animals as soon as they were found. Heavy infestations were being reported as late as November from Punta Gorda (south). GULF COAST TICK (*Amblyomma maculatum*) was the species most often reported on cattle in the southern part of the State. Populations as high as 815 were reported on some cows in August. Forty-four percent of 277 cows were infested with an average of 14 ticks, while 289 cows in adjacent pasture were practically free of the tick. Dipping and rotating the cattle to fresh pastures helped reduce populations.

PENNSYLVANIA

Reported by J. O. Pepper

Cereal and Forage Insects:
The ALFALFA WEEVIL (*Hypera postica*) has been found in 14 counties and severe damage occurred in a number of fields, particularly by larvae on the first cutting in Lancaster, York, Delaware, and Chester Counties. Recommended standard sprays to control overwintering adults did not give satisfactory results. Counties in which the alfalfa weevil has been found are as follows:

York - 1952
Lancaster - 1952
Chester - 1953
Delaware - 1953
Adams - 1954
Franklin - 1954
Bucks - 1954
Cumberland - 1954
Lebanon - 1954
Berks - 1954
Montgomery - 1954
Schuylkill - 1954
Dauphin - 1954
Snyder (Originally reported as Juniata County)- 1954

The ALFALFA PLANT BUG (*Adelphocoris lineolatus*) was found in Fulton, Adams, Montgomery, Berks, Lebanon, and Bucks Counties in late 1953. No damage data are available. A late generation of ARMYWORM (*Pseudaletia unipuncta*) caused some damage the latter part of July in the following counties: Lycoming, Lackawanna, Susquehanna, Tioga, Centre, Clearfield, Butler, Crawford, Erie, Warren, McKean, Potter Sullivan, Somerset. Control measures were necessary in some sections and at least 2000 acres were sprayed. The actual loss was not extensive. The spring generation of HESSIAN FLY (*Phytophaga destructor*) caused as high as 70 percent lodging of wheat in

Juniata County and a considerable increase of infested wheat was noted generally. The fall generation was quite severe in early-planted wheat in the central area and considerable losses were noted. Infestations were also found in barley. EUROPEAN WHEAT STEM SAWFLY (*Cephus pygmaeus*) infested as high as 50 percent of the stand with considerable lodging and was generally abundant in southwestern Pennsylvania. Twenty acres of wheat was destroyed in Clarion County by WHEAT WIREWORM (*Agriotes mancus*). ENGLISH GRAIN APHID (*Macrosiphum granarium*) was present generally but not as severe as in 1953. Control measures for MEADOW SPITTLEBUG (*Philaenus leucophthalmus*) are generally accepted and the average increase in dry hay by controlling this pest was over one-half a ton for the fourth year in succession. Control measures were necessary in southeastern Pennsylvania for the PEA APHID (*Macrosiphum pisi*) in many alfalfa and clover fields. CLOVER ROOT BORER (*Hylastinus obscurus*) was very abundant in most clover fields and the TWO-SPOTTED SPIDER MITE (*Tetranychus bimaculatus*) was observed doing damage in a number of clover fields. Egg punctures by a BILLBUG (*Calendra minima*) was noted in much of the wheat stems examined. POTATO LEAFHOPPER (*Empoasca fabae*) became abundant after the first cutting of alfalfa, particularly in the southern part of the State. Average increases of dry hay of almost one-half ton resulted from control measures. The EUROPEAN CORN BORER (*Pyrausta nubilalis*) was slightly less than in 1953 and in many parts of the State evidences of damage were obscured by favorable growing conditions. LESSER CLOVER LEAF WEEVIL (*Hypera nigrirostris*) was very abundant in south central Pennsylvania and numerous *H. meles* were collected.

Fruit Insects:
CODLING MOTH (*Carpocapsa pomonella*) increased over 1953 and RED-BANDED LEAF ROLLER (*Argyrotaenia velutiana*) caused considerable damage late in the season in some sections. LESSER APPLEWORM (*Grapholitha prunivora*) increased in northwestern Pennsylvania. MITES are becoming a most important pest on apples. The PLUM CURCULIO (*Conotrachelus nenuphar*) is much less important on apples than a few years ago. APPLE MAGGOT (*Rhagoletis pomonella*) was also considerably less than 1953. The PEACH TREE BORER (*Sanninoidea exitiosa*) increased considerably on plums, prunes, and cherries. An increase in catfacing injury by PLANT BUGS and STINK BUGS on peaches was noted. LESSER PEACH BORER (*Synanthedon pictipes*) is present in most peach orchards in northwestern Pennsylvania. GRAPE BERRY MOTH (*Polychrosis viteana*) was heavier than in several past years. CHERRY FRUIT FLIES (*Rhagoletis cingulata* and *R. fausta*) continue to be a problem in northwestern Pennsylvania.

Vegetable Insects:

TOMATO RUSSET MITE (*Vasates lycopersici*) was reported from Mercer, Fulton, Adams, Franklin, Lancaster, York, Luzerne, Schuylkill, Lehigh, Berks, and Cumberland Counties in 1954. Control measures were necessary in most places and in Mercer County three acres of tomatoes were destroyed. All infestations were on plants from southern sources. TWO-SPOTTED SPIDER MITES severely injured a tomato field in Cumberland County. POTATO FLEA BEETLE (*Epitrix cucumeris*) and TOBACCO FLEA BEETLE (*E. hirtipennis*) were very abundant on tomatoes in the south central area shortly after planting. GARDEN SLUGS and VARIEGATED CUTWORM (*Peridroma margaritosa*) were particularly damaging to garden tomatoes. SEED-CORN MAGGOT (*Hylemya cilicrura*) in many sections damaged planted seeds and in western Pennsylvania some fields of sweet corn had to be replanted. CORN FLEA BEETLE (*Chaetocnema pulicaria*) was quite active on corn in southeastern Pennsylvania early in the season. More than the usual number of reports of the RHUBARB CURCULIO (*Lixus concavus*) were received. The POTATO STALK BORER (*Trichobaris trinotata*) and POTATO LEAFHOPPER (*Empoasca fabae*) caused some damage; the latter where spraying of potatoes was neglected for pea harvestings. Control of WIREWORMS was necessary in some areas.

Forest, Shade Tree and Ornamental Insects:

The EUROPEAN PINE SHOOT MOTH (*Rhyacionia buoliana*) continues to be a major pest of Christmas tree plantations and ornamental plantings. WEEVILS (*Hylobius pales* and *Pissodes approximatus*) caused extensive damage in plantations. These pests breed in the cut stumps in Christmas tree plantations. PINE CHAFER (*Anomala oblivia*) heavily damaged the needles of a Scotch pine plantation in Cambria County. Heavy damage by PINE TORTOISE SCALE (*Toumeyella numismaticum*) was noted in Clearfield County. Other insects causing some injury to evergreen plantations were an APHID (Cinara watsonii) and PINE WEBWORM (*Tetralopha robustella*). BLACK VINE WEEVIL (*Brachyrhinus sulcatus*) severely damaged taxus and hemlock in several sections. EASTERN SPRUCE GALL APHID (*Chermes abietis*) was severe in some spruce plantings. Extensive defoliation of forest trees occurred in southeastern sections of the State by the FALL CANKERWORM (*Alsophila pometaria*).

Insects Affecting Man and Animals:

STABLE FLIES (*Stomoxys calcitrans*) apparently were more abundant than usual. NORTHERN FOWL MITE (*Bdellonyssus* *sylviarum*) was found in several poultry houses.

Household Insects:
CLOVER MITE (*Bryobia praetiosa*), BOXELDER BUG (*Leptocoris trivittatus*) and ELM LEAF BEETLE (*Galeruclella xanthomelaena*) caused considerable concern in homes. CARPET BEETLES appear to be more common than usual. POWDER POST BEETLES caused much damage.

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Some of the More Important Economic Insects of Pennsylvania - 1954, as Evaluated by the Extension Entomology Office of The Pennsylvania State University.

Meadow spittlebug (*Philaenus leucophthalmus*).
House fly (*Musca domestica*).
Biting flies on animals (*Stomoxys calcitrans*, *Siphona irritans*, *Tabanus* sp. and *Chrysops* sp.).
Leafhoppers (mainly on hay and potatoes). (*Empoasca fabae*).
Root maggots - several sp.
Mites - several sp.
Flea beetles - several sp.
Codling moth (*Carpocapsa pomonella*).
Cutworms - several sp., including armyworms.
Wireworms - several sp.

USDA, AGRL RESEARCH SERVICE
ENTOMOLOGY RESEARCH BR
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3-7-55 PLANT INDUSTRY STATION
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